

ABSTRACT

A vapour recovery system and method for volatile chemicals which enhances the efficiency and safety of the process of recovering the vapour is disclosed. The volatile substance is vaporized in a distillation unit under the control of a computerised heating system. The resulting vapour is first directly condensed by bubbling the vapour directly into the liquid phase of that volatile substance. Any vapour that remains after having passed through said liquid phase accumulates above the liquid phase and is allowed to escape into a vapour management module. The vapour management module facilitates efficient condensation of the vapour by allowing heat exchange from the vapour to a material contained within said vapour management module. Upon cooling in the vapour management module, the vapour condenses, and can run back into the liquid phase through which it had passed when in the vapour phase. The vapour management module has an exhaust that is substantially free of the vapour.